

Claims Listing:

Claims 1-25 (canceled)

26. (original) Apparatus for transporting substrates within a vacuum chamber, the apparatus comprising:

a pair of spaced apart parallel metal belts positioned within the vacuum chamber;
a translator for bidirectionally moving the pair of metal belts in concert; and
a plurality of aligned, periodically-spaced tabs positioned on an outer surface of each of the metal belts for retaining a plurality of the substrates in fixed positions spanning the metal belts.

27. (original) Apparatus for transporting substrates within a vacuum chamber as in claim 26, wherein the vacuum chamber includes front and rear openings through which the pair of metal belts and the substrates pass, extending outside said front and rear openings, the apparatus further comprising:

a clearance distance between each of the substrates and the front and rear openings so as to permit motion of the substrates while at the same time restricting air leaks, to thereby maintain a desired level of vacuum in the chamber.

28. (original) Apparatus for transporting and processing a plurality of substrates by exposing them to heating, film deposition or vapor treatment within a vacuum chamber, the apparatus comprising:

a plurality of heated pockets positioned in proximity to and in correspondence with each of the plurality of substrates such that a clearance distance between a surface of each of the substrates and the corresponding one of the heated pockets is minimized so as

to permit motion of the substrates while restricting vapor leaks from the heated pockets;
and

a transporter for moving the substrates from one heated pocket to the next.

29. (original) Apparatus as in claim 28, wherein the transporter comprises:

a pair of spaced apart parallel metal belts positioned within the vacuum chamber;

a translator for bidirectionally moving the pair of metal belts in concert;

a plurality of aligned, periodically-spaced tabs positioned on an outer surface of each of the metal belts for retaining a plurality of the substrates in fixed positions spanning the metal belts; and

a controller, coupled to said translator, for indexing the belts incrementally to move each of the substrates from one heated pocket to another.

30. (original) Apparatus as in claim 28, wherein a selected one or more of the heated pockets includes a high voltage pin coupled to a source of D.C. voltage for creating a plasma within the selected one or more of the heated pockets.

Claims 31-53 (canceled)